ENERGY STAR® Program Requirements for Pre-Rinse Spray Valves

DRAFT 1 Eligibility Criteria

Below is the **DRAFT 1** product specification for ENERGY STAR qualified pre-rinse spray valves. A product must meet all of the identified criteria if it is to be labeled as ENERGY STAR by its manufacturer.

1) **Definitions**: Below is a brief description of a pre-rinse spray valve and other related terms as relevant to ENERGY STAR.

   A. Pre-Rinse Spray Valve: A handheld device that uses a spray of water to remove food waste from dishes prior to cleaning in a dishwasher. Pre-rinse spray valves consist of a spray nozzle, a squeeze lever that controls the water flow, and a dish guard bumper. Models may include a spray handle clip, allowing the user to lock the lever in the full spray position for continual use.

   B. Flow Rate: The maximum amount of water, in gallons, that can flow through the pre-rinse spray valve per minute. Flow rate is expressed in gallons per minute (gpm) at pounds per square inch (psi).

   C. Cleanability (Cleaning Performance): The effectiveness of the pre-rinse spray valve to remove soil from the plate before it is placed in a dishwashing machine. Cleanability is measured in seconds per plate.

> ***Note**: Research has shown that not all low-flow designs exhibit comparable cleaning performance. Consistent with ENERGY STAR's Guiding Principles, this Draft 1 specification includes cleanability requirements to help ensure that product quality is never compromised for energy efficiency. To read more about the key principles that guide EPA's specification development efforts, visit www.energystar.gov/productdevelopment.*

2) **Qualifying Products**: In order to qualify as ENERGY STAR, a pre-rinse spray valve model must meet the definition in Section 1.A and the specification requirements provided in Section 3, below.

3) **Energy-Efficiency Specifications for Qualifying Products**: Only those products listed in Section 2 that meet the following criteria for both Flow Rate and Cleanability may qualify as ENERGY STAR. Effective dates for Tiers 1 and 2 are provided in Section 5 of this specification.

   A. Tier 1: Proposed ENERGY STAR requirements for Flow Rate and Cleanability are provided in Table 1, below.

Table 1: Proposed Tier 1 ENERGY STAR Criteria for Pre-Rinse Spray Valves

Flow Rate (at 60 psi)	Cleanability
≤ 1.6 gpm	≤ 26 seconds per plate

   B. Tier 2: To continually recognize the most efficient models on the market and reflect improvements in technology, EPA is proposing to implement a Tier 2 specification. Table 2, below, provides the suggested Flow Rate and Cleanability requirements.

Table 2: Proposed Tier 2 ENERGY STAR Criteria for Pre-Rinse Spray Valves

Flow Rate (at 60 psi)	Cleanability
≤ 1.4 gpm	≤ 26 seconds per plate

Approximately one year prior to the Tier 2 effective date, EPA will begin a review of the Tier 2 specification. During this evaluation process, EPA will assess the market in terms of energy efficiency and new technology. Prior to and during this time frame, industry will have an opportunity to share its data, submit proposals, and voice any concerns. EPA will strive to ensure that the Tier 2 specification recognizes the most energy-efficient models and rewards those manufacturers who have made efforts to further improve efficiency.

Note: *EPA is proposing a spray valve specification with two tiers of effective dates to incrementally phase in lower efficiency levels over time. This phase-in period will enable more manufacturers to commit to gradually lowering their products' water and energy consumption and should help ensure that these efficient products remain cost-effective for the purchaser.*

The primary objective of ENERGY STAR is to recognize the most energy-efficient products in the market through the use of the ENERGY STAR label. In developing a specification, EPA considers the following criteria:

- *Significant energy savings can be realized on a national basis*
- *Product performance is maintained or enhanced with increased efficiency*
- *Energy-efficient purchase will be cost effective*
- *Energy efficiency can be achieved through several technology options; at least one of which is non-proprietary*
- *Product energy consumption and performance can be measured and verified with testing*
- *Labeling would effectively differentiate products and be visible for purchasers*

It is not EPA's intention to design a specification that will allow every model to qualify as ENERGY STAR. Based on preliminary data provided by the Food Service Technology Center (FSTC), it is estimated that the Tier 1 specification level captures the more efficient models on the market. However, there are limited data points available, thereby making it difficult to determine the feasibility of the proposed performance requirements, particularly for Tier 2. EPA is interested in collecting additional data from manufacturers and other interested parties to determine if the specification levels are feasible and justified based on the above criteria.

4) **Test Methodology**: The specifics for testing the flow rate and cleanability of a pre-rinse spray valve are outlined in ASTM Standard F 2324-03: Standard Test Method for Prerinse Spray Valves. Manufacturers are required to perform tests using this ASTM Standard to determine ENERGY STAR qualification.

   Submittal of Qualified Product Data to EPA: Partners are required to self-certify those product models that meet the ENERGY STAR guidelines and report information to EPA. ENERGY STAR qualifying product lists, including information about new models as well as notification of discontinued models, must be provided on an annual basis, or more frequently if desired by the manufacturer.

5) **Effective Date**: The date that manufacturers may begin to qualify and promote products as ENERGY STAR will be defined as the *effective date* of the agreement. The proposed ENERGY STAR pre-rinse spray valve effective date is **August 1, 2005**. For Tier 2, the effective date is **TBD** and will be informed by stakeholder comments and discussions.

Note: *EPA is considering the announcement of an ENERGY STAR Specification for Pre-Rinse Spray Valves, in partnership with industry, at the NAFEM show in September 2005. EPA is interested in obtaining stakeholder feedback on this idea, as well as an appropriate effective date that would allow for ENERGY STAR qualified and labeled products to be available at the time of the announcement. Finally, EPA welcomes input on a Tier 2 effective date and the amount of time needed to redesign products to meet the more aggressive Tier 2 levels.*

6) **Future Specification Revisions**: EPA reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment.

In keeping with current policy, revisions to the specification are arrived at through stakeholder discussions. In the event of a specification revision, please note that ENERGY STAR qualification is not automatically granted for the life of a product model. To qualify as ENERGY STAR, a product model must meet the ENERGY STAR specification in effect on the model's date of manufacture. The date of manufacture is specific to each unit and is the date on which a unit is considered to be completely assembled.